Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND		
L6	L3 and ((DNA adj vaccine) or (genetic adj immunization))	31	L6
L5	L4 same (DNA or vector)	2	L5
L4	L3 same (polyethylenimine or polylysine or polycationic)	6	L4
L3	(macroaggregated or aggregated) same (albumin or ligand or transferrin or protein or antibody)	2891	L3
L2	Bhogal-Balbir-S$.in.	8	L2
L1	Orson-frank-M$.in.	0	L1

END OF SEARCH HISTORY

```
### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 02.12.60D

Last logoff:  28mar03 15:34:58
Logon file001 01apr03 15:22:56
           *** ANNOUNCEMENT ***
                    ***
--File 515 D&B Dun's Electronic Business Directory is now online
completely updated and redesigned. For details, see HELP NEWS 515.
                    ***
--File 990 - NewsRoom now contains October 2002 to present records.
File 993 - NewsRoom archive contains 2002 records from January 2002-
September 2002. To search all 2002 records, BEGIN 990,993 or B NEWS2002
                    ***
--Alerts have been enhanced to allow a single Alert profile to be
stored and run against multiple files. Duplicate removal is available
across files and for up to 12 months. The Alert may be run according
to the file's update frequency or according to a custom
calendar-based schedule. There are no additional prices for these
enhanced features. See HELP ALERT for more information.
                    ***
--U.S. Patents Fulltext (File 654) has been redesigned with
new search and display features.  See HELP NEWS 654 for
information.
                    ***
--Connect Time joins DialUnits as pricing options on Dialog.
See HELP CONNECT for information.
                    ***
--CLAIMS/US Patents (Files 340,341, 942) have been enhanced
with both application and grant publication level in a
single record. See HELP NEWS 340 for information.
                    ***
--SourceOne patents are now delivered to your email inbox
as PDF replacing TIFF delivery. See HELP SOURCE1 for more
information.
                    ***
--Important news for public and academic
libraries.  See HELP LIBRARY for more information.
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
For information about the access to file 43 please see Help News43.
***
NEW FILES RELEASED
***Dialog NewsRoom - Current 3-4 months (File 990)
***Dialog NewsRoom - 2002 Archive (File 993)
***Dialog NewsRoom - 2001 Archive (File 994)
***Dialog NewsRoom - 2000 Archive (File 995)
***TRADEMARKSCAN-Finland (File 679)
```

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***TRADEMARKSCAN-Norway [redacted]le 678)
***TRADEMARKSCAN-Sweden  (File 675)
                  ***
UPDATING RESUMED
***Delphes European Business (File 481)
                  ***
RELOADED
***D&B Dun's Electronic Business Directory (File 515)
***U.S. Patents Fulltext 1976-current (File 654)
***Population Demographics (File 581)
***Kompass Western Europe (File 590)
***D&B - Dun's Market Identifiers  (File 516)

REMOVED
***Chicago Tribune (File 632)
***Fort Lauderdale Sun Sentinel (File 497)
***The Orlando Sentinel (File 705)
***Newport News Daily Press (File 747)
***U.S. Patents Fulltext 1980-1989 (File 653)
***TOXNET data is added to ToxFile (F156)

***New document supplier***
IMED has been changed to INFOTRIE (see HELP OINFOTRI)


     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                  ****
KWIC is set to 50.
HILIGHT set on as '*'
* * * *

File   1:ERIC  1966-2003/Mar 24
       (c) format only 2003 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 159, 5, 73
       01apr03 15:23:07 User259876 Session D484.1
            $0.35    0.101 DialUnits File1
     $0.35  Estimated cost File1
     $0.04  TELNET
     $0.39  Estimated cost this search
     $0.39  Estimated total session cost   0.101 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2003/Mar W4
        (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.
  File 159:Cancerlit  1975-2002/Oct
        (c) format only 2002 Dialog Corporation
*File 159: Cancerlit ceases updating with immediate effect.
Please see HELP NEWS.
  File   5:Biosis Previews(R)  1969-2003/Mar W4
        (c) 2003 BIOSIS
*File   5: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.
  File  73:EMBASE  1974-2003/Mar W4
        (c) 2003 Elsevier Science B.V.
*File  73: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.

      Set  Items  Description
```

```
?s (aggregated or macroaggregated) (s) (albumin or transferrin or protein or ligand)
Processing
          34901  AGGREGATED
           1583  MACROAGGREGATED
         266371  ALBUMIN
          61794  TRANSFERRIN
        3781693  PROTEIN
         274610  LIGAND
      S1   12308  (AGGREGATED OR MACROAGGREGATED) (S) (ALBUMIN OR
                  TRANSFERRIN OR PROTEIN OR LIGAND)
?s s1 (s) (polyethylenimine or polylysine or polyimine)
          12308  S1
           1216  POLYETHYLENIMINE
           9451  POLYLYSINE
             13  POLYIMINE
      S2      24  S1 (S) (POLYETHYLENIMINE OR POLYLYSINE OR POLYIMINE)
?s s2 (s) (DNA or vector)
             24  S2
        2107903  DNA
         216464  VECTOR
      S3      7  S2 (S) (DNA OR VECTOR)
?rd
...completed examining records
      S4      3  RD (unique items)
?t s4/3,k/all
```

4/3,K/1 (Item 1 from file: 155)

14331956 22414728 PMID: 12526712

Novel Shielded Transferrin-Polyethylene Glycol-Polyethylenimine/DNA Complexes for Systemic Tumor-Targeted Gene Transfer.

Kursa Malgorzata; Walker Greg F; Roessler Vanessa; Ogris Manfred; Roedl Wolfgang; Kircheis Ralf; Wagner Ernst; et al

Pharmaceutical Biology-Biotechnology, Department for Pharmacy, Ludwig-Maximilians-Universitaet, Butenandtstrasse 5-13, D-81377 Muenchen, Germany, and Boehringer Ingelheim Austria, Dr Boehringer Gasse 5-11, A-1121 Vienna, Austria.

Bioconjugate chemistry (United States) Jan-Feb 2003, 14 (1) p222-31, ISSN 1043-1802 Journal Code: 9010319

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: In Process

Tumor-targeting *DNA* complexes which can readily be generated by the mixing of stable components and freeze-thawed would be very advantageous for their subsequent application as medical products. Complexes were generated by the mixing of plasmid *DNA*, linear *polyethylenimine* (PEI22, 22 kDa) as the main *DNA* condensing agent, PEG-PEI (poly(ethylene glycol)-conjugated PEI) for surface shielding, and Tf-PEG-PEI (*transferrin*-PEG-PEI) to provide a *ligand* for receptor-mediated cell uptake. Within the shielding conjugates, PEG chains of varying size (5, 20, or 40 kDa) were conjugated with either linear PEI22 (22 kDa) or branched PEI25 (25 kDa). The three polymer components were mixed together at various ratios with *DNA* ; particle size, surface charge, in vitro transfection activity, and systemic gene delivery to tumors was investigated. In general, increasing the proportion of shielding conjugate in the complex reduced surface charge, particle size, and in vitro transfection efficiency in *transferrin* receptor-rich K562 cells. The particle size or surface charge of the complexes containing the PEG-PEI conjugate did not significantly change after freeze-thawing, while complexes without the shielding conjugate *aggregated* . Complexes containing PEG-PEI conjugate efficiently transfected K562 cells after freeze-thawing. Furthermore the

systemic application of freeze-thawed complexes exhibited in vivo tumor targeted...

... the highest expression was found in tumor tissue of mice. An optimum formulation for in vivo application, PEI22/Tf-PEG-PEI/PEI22-PEG5, containing plasmid *DNA* encoding for the tumor necrosis factor (TNF-alpha), inhibited tumor growth in three different murine tumor models. These new *DNA* complexes offer simplicity and convenience, with tumor targeting activity in vivo after freeze-thawing.

4/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09808439 21616843 PMID: 11741272
DNA/polyethylenimine transfection particles: influence of ligands, polymer size, and PEGylation on internalization and gene expression.
Ogris M; Steinlein P; Carotta S; Brunner S; Wagner E
Institute of Biochemistry, University of Vienna, Vienna, Austria. manfred.ogris@cup.uni-muenchen.de
AAPS pharmSci electronic resource (United States) 2001, 3 (3) pE21, ISSN 1522-1059 Journal Code: 100897065
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Receptor-binding ligands have been incorporated into *DNA*/ *polyethylenimine* (PEI) complexes to enhance cell binding and cellular internalization. This study characterizes receptor-mediated uptake of *DNA* /PEI complexes on a cellular basis. A novel assay based on flow cytometry was applied, discriminating between total cell-associated and extracellularly bound *DNA* complexes. Receptor-mediated uptake of *ligand* -containing *DNA* /PEI (molecular weight, 800 kd) complexes was found to occur quickly (within 1 hour), whereas unspecific uptake through adsorptive endocytosis is less efficient or requires extended periods to reach the same degree of internalization. Rapid, receptor-mediated internalization requires a small complex size; however, large, *aggregated* complexes show higher gene expression. Using PEI 25 kd conjugated to large proteins such as *transferrin* or antibodies, improper condensation with *DNA* leads to suboptimal uptake and gene expression, whereas partial replacement of *ligand* -PEI with unconjugated PEI increases both uptake and transfection. In contrast, the 8 kd *protein* epidermal growth factor conjugated to PEI 25 kd properly condenses *DNA* and mediates specific uptake into human adenocarcinoma (KB) cells. Modification of the complex surface with appropriate amounts of poly(ethylene glycol) (PEG) does not block *ligand* -mediated internalization. A higher degree of PEGylation reduces the internalization of *transferrin* or antibody-containing complexes to a level similar to that of *ligand*-free complexes. In contrast, epidermal growth factor "mediated uptake is less effected by excessive PEGylation.

4/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09549294 21330332 PMID: 11437332
A small, synthetic peptide for gene delivery via the serpin-enzyme complex receptor.
Patel S; Zhang X; Collins L; Fabre J W
Department of Clinical Sciences, Guy's, King's and St Thomas' School of Medicine, King's College Hospital, London, UK.
journal of gene medicine (England) May-Jun 2001, 3 (3) p271-9, ISSN 1099-498X Journal Code: 9815764
Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...serpin-enzyme complex receptor (SECR) has previously been successfully targeted for gene delivery using synthetic peptide ligands covalently linked in fluid phase to commercially available *polylysine* preparations (approximately 10-54kDa). The objective of the present study was to improve this approach by the use of small, bifunctional, and easily standardised synthetic peptides. METHODS: Two synthetic peptides designated *polylysine* antitrypsin 1 (PAT1) (K16 FNKPFVFLI) and PAT2 (K16 CSIPPEVKFNKPFVFLI) were evaluated for gene delivery to the HUH7 human hepatocyte cell line. The K16 moiety binds *DNA* electrostatically, while the FVFLM motif of human alpha1-antitrypsin targets the SECR. RESULTS: Both PAT1 and PAT2 bind to and condense *DNA* into small particles as shown by laser scattering techniques. However, only PAT2 is effective for gene delivery, presumably on account of the greater distance between the K16 chain and the FVFLM motif. Gene delivery by PAT2/*DNA* complexes is chloroquine-dependent, can be blocked completely by free *ligand* (CSIPPEVKFNKPFVFLI), and is highly efficient (e.g. approximately five-fold more effective than lipofectamine). At physiological salt concentrations, PAT2/*DNA* complexes formed at 4 microg/ml *DNA* are approximately 350 nm in diameter and highly effective for gene transfer, but at 100 microg/ml *DNA* the complexes are *aggregated* (diameter > 4 microm) and inactive. CONCLUSIONS: A small (33 amino acid), bifunctional, synthetic peptide represents a highly efficient and readily standardised *DNA* *vector* for the SECR. The effectiveness of this peptide depends on the distance of the K16 moiety from the targeting *ligand*. High salt concentrations are not required to form effective *vector*/*DNA* complexes.
?ds

Set	Items	Description
S1	12308	(AGGREGATED OR MACROAGGREGATED) (S) (ALBUMIN OR TRANSFERRIN OR PROTEIN OR LIGAND)
S2	24	S1 (S) (POLYETHYLENIMINE OR POLYLYSINE OR POLYIMINE)
S3	7	S2 (S) (DNA OR VECTOR)
S4	3	RD (unique items)

?rd s2
...completed examining records

S5	15	RD S2 (unique items)

?s s5 not s4

	15	S5
	3	S4
S6	12	S5 NOT S4

?t s6/3,k/all

6/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

14015196 22295938 PMID: 12407765
Targeted delivery of expression plasmids to the lung via *macroaggregated* *polyethylenimine*-*albumin* conjugates.
Orson Frank M; Kinsey Berma M; Bhogal Balbir S; Song Ling; Densmore Charles L; Barry Michael A; et al
Center for AIDS Research, Veterans Affairs Medical Center, Departments of Internal Medicine and Microbiology and Immunology, Baylor College of Medicine, Houston, TX, USA.
Methods in molecular medicine (United States) 2003, 75 p575-90,
Journal Code: 101123138
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: In Process

Targeted delivery of expression plasmids to the lung via

macroaggregated *polye[redacted]lenimine*-*albumin* conjugates

6/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11186022 98062504 PMID: 9471398
[Charge interactions of immune deposits in glomeruli (experimental study)]
Nabojove interakce pri glomerularni imunodepozici (experimentalni studie).
Rossmann P; Riha I; Sirova M; Bilej M; Matousovic K; Bohdanecka M
Mikrobiologicky ustav Akademie ved CR.
Ceskoslovenska patologie (CZECH REPUBLIC) Aug 1997, 33 (3) p89-98, ISSN 1210-7875 Journal Code: 0050734
Document type: Journal Article ; English Abstract
Languages: CZECH
Main Citation Owner: NLM
Record type: Completed

An i.v. injection of 8-40 mg (kg cationized and heat-*aggregated* rabbit or human Ig (cat-aggr RIg,-HuIg; pI 9.5) elicited a strong diffuse linear fixation in rat glomerular capillaries revealed by one-step...

... 2 h post-injection. Preferential binding to the lamina rara externa (LRE) was documented in ultrastructure by preembedding and postembedding assays (HRP-coupled antibody and *protein* A-colloidal gold, respectively). After 24 and 48 h the glomeruli were negative. *Polyethylenimine* (PEI)-reactive polyanion of LRE was significantly reduced 1 h after cat-aggr-Ig; depletion persisted even after 48 h. Non-cationized Ig aggregates did...

6/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07395938 92259182 PMID: 1582816
Magnetic resonance imaging detection of an experimental pulmonary perfusion deficit using a macromolecular contrast agent. Polylysine-gadolinium-DTPA40.
Berthezene Y; Vexler V; Price D C; Wisner-Dupon J; Moseley M E; Aicher K P; Brasch R C
Contrast Media Laboratory, Department of Radiology, University of California, San Francisco 94143-0628.
Investigative radiology (UNITED STATES) May 1992, 27 (5) p346-51, ISSN 0020-9996 Journal Code: 0045377
Contract/Grant No.: CA 49786; CA; NCI
Erratum in Invest Radiol 1992 Aug;27(8) 582
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

RATIONALE AND OBJECTIVES. This study was designed to evaluate the potential of a blood-pool magnetic resonance (MR) contrast agent, *polylysine*-gadolinium-DTPA40 (*polylysine* -Gd-DTPA40) for detecting pulmonary perfusion defects. MATERIALS AND METHODS. Pulmonary emboli were induced in 10 rats by venous injection of 0.2 mL of air. Axial spin-echo images were acquired (TR = 800 mseconds; TE = 6 mseconds) before and after air injection and serially after the administration of *polylysine* -Gd-DTPA40. The embolism model was confirmed by scintigraphy using 99mTc-*macroaggregated* *albumin*. RESULTS. Signal intensity differences between normal and embolized lungs before and after the air injection were less than 25%. After *polylysine*-Gd-DTPA40 administration, signal intensity of

the perfused lung increased more than 200%, whereas the embolized lung increased by only 25%. Signal intensities of the...

6/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05620699 87300129 PMID: 3620698
Thromboxane A2 causes feedback amplification involving extensive thromboxane A2 formation on close contact of human platelets in media with a low concentration of ionized calcium.
Packham M A; Kinlough-Rathbone R L; Mustard J F
Blood (UNITED STATES) Sep 1987, 70 (3) p647-51, ISSN 0006-4971 Journal Code: 7603509
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...to produce these responses. Platelets were washed and resuspended in a modified Tyrode solution to which no calcium salt was added that contained 0.35% *albumin* and apyrase. This medium contains 20 mumol/L Ca2+ and 1 mmol/L Mg2+. Platelets were *aggregated* with adenosine diphosphate (ADP) in the presence of fibrinogen, agglutinated with *polylysine*, or after pretreatment with chymotrypsin, *aggregated* with fibrinogen. In the low-Ca2+ medium, all these agonists caused platelets to adhere to each other, followed by secondary aggregation with TXA2 formation and...

6/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04816885 85123203 PMID: 2982440
Effects on the buoyant density of rabbit platelets of ADP and agents that increase the concentration of cyclic AMP.
Packham M A; Perry D W; Kinlough-Rathbone R L; Rand M L; Guccione M A; Evans R M; Mustard J F
Blood (UNITED STATES) Mar 1985, 65 (3) p564-70, ISSN 0006-4971 Journal Code: 7603509
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Rabbit platelets were *aggregated* by adenosine diphosphate (ADP), allowed to deaggregate and then separated into density subpopulations by centrifugation through discontinuous Stractan density gradients. Although ADP causes little or...

... stimulated with ADP increased initially, but returned to control values during a one-hour period. A similar decrease in platelet density was observed with an *albumin* density gradient. Under conditions in which aggregation did not occur in response to ADP with ethylenediaminetetraacetic acid (EDTA) in the medium, little or no decrease in platelet density was observed. Agglutination with *polylysine* did not change platelet density. Thus, not only agents such as thrombin and plasmin that cause the release of the contents of the platelet granules...

6/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03621720 82032351 PMID: 6169799

Interactions between [redacted]lymerized human albumin, hep[redacted]itis B surface antigen, and complement: I. Binding of polyalbumin to Clq.

Milich D R; Papas E D; Bhatnagar P K; Vyas G N

Journal of medical virology (UNITED STATES) 1981, 7 (3) p181-92, ISSN 0146-6615 Journal Code: 7705876

Contract/Grant No.: P-50-AM-18520; AM; NIADDK; R01-AI-15781-01; AI; NIAID

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... considerable evidence that substances other than immunoglobulins can bind human Clq. Utilizing purified human Clq immobilized on polystyrene beads, we have demonstrated that polymerized human *albumin* (PHALB-125I) binds to human Clq in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in the human Clq bound only human, and not xenogeneic, polyalbumins. Similarly, polymers of various other human plasma proteins...

... To demonstrate that this interaction was not unique to immobilized Clq, soluble Clq was shown to inhibit PHALB-125I binding to solid phase Clq. Because *aggregated* IgG, poly(I):poly(C), dextran sulfate, polyglutamic acid, and *polylysine* have been previously shown to bind Clq, we used them in further blocking experiments and found them also to inhibit the interaction between Clq and...

... temperature dependent. In addition, human Clq was not observed to bind hepatitis B surface antigen (HBsAg) directly; however, in the presence of sufficiently polymerized human *albumin* a Clq-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function as well as in the host defense mechanisms...

6/3,K/7 (Item 7 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

03516531 81208446 PMID: 7236775

[Bimolecular protein-protein interactions in microcapsules]

Izuchenie bimolekuliarnykh belok-belkovykh vzaimodeistvii vnutri mikrokapsul.

Aisina R B; Gracheva I I; Karpukova L P; Kazanskaia N F

Biokhimiia (Moscow, Russia) (USSR) Nov 1980, 45 (11) p1949-59, ISSN 0320-9725 Journal Code: 0372667

Document type: Journal Article ; English Abstract

Languages: RUSSIAN

Main Citation Owner: NLM

Record type: Completed

It was shown that *protein*-*protein* interactions in microcapsules are possible. A mixture of two proteins at high concentrations was microencapsulated at acidic pH values of the aqueous phase under the following conditions: use of the double emulsification method, use of the inert filler--5% *polyethylenimine* for the formation of spherical non-*aggregated* microcapsules containing a small quantity of the *protein* in the membrane, and use of polycarbonate as a film-forming polymer. The kinetics of trypsin inhibition by soya inhibitor, trypsin autolysis and trypsinogen autoactivation...

6/3,K/8 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

03528988 BIOSIS NO.: 000073032068

INTERACTIONS BETWEEN POL[redacted]RIZED HUMAN ALBUMIN HEPATITIS B [redacted]URFACE ANTIGEN AND COMPLEMENT 1. BINDING OF POLY ALBUMIN TO COMPLEMENT C-1Q

AUTHOR: MILICH D R; PAPAS E D; BHATNAGAR P K; VYAS G N
AUTHOR ADDRESS: DEP. OF LABORATORY MEDICINE, M-523, UNIV. OF CALIFORNIA, SCHOOL OF MEDICINE, SAN FRANCISCO, CALIF. 94143.
JOURNAL: J MED VIROL 7 (3). 1981. 181-192. 1981
FULL JOURNAL NAME: Journal of Medical Virology
CODEN: JMVID
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Substances other than Ig apparently can bind human C1q [q fragment of complement component 1]. Utilizing purified human C1q immobilized on polystyrene beads, polymerized human *albumin* (PHALB-125I) bound to human C1q in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in that human C1q bound only human and not xenogeneic polyalbumins. Polymers of various other human plasma proteins were unreactive. This interaction was not unique to immobilized C1q because soluble C1q inhibited PHALB-125I binding to solid phase C1q. Because *aggregated* IgG, poly(I):poly(C), dextran sulfate, polyglutamic acid and *polylysine* were shown to bind C1q, the substances were used in further blocking experiments and were found to inhibit the interaction between C1q and PHALB. Anti...

...was pH, ionic strength and temperature dependent. Human C1q did not bind hepatitis B surface antigen (HBsAg) directly; in the presence of sufficiently polymerized human *albumin*, a C1q-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function and in the host defense mechanism involved in...

6/3,K/9 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

03506572 BIOSIS NO.: 000073009652
BI MOLECULAR PROTEIN-PROTEIN INTERACTIONS IN MICRO CAPSULES
AUTHOR: AISINA R B; GRACHEVA I I; KARPUKOVA L P; KAZANSKAYA N F
AUTHOR ADDRESS: DEP. CHEM. ENZYMOL., FAC. CHEM., M. V. LOMONOSOV MOSCOW STATE UNIV., MOS COW, USSR.
JOURNAL: BIOKHIMIYA 45 (11). 1980 (RECD. 1981). 1949-1959. 1980
FULL JOURNAL NAME: Biokhimiya
CODEN: BIOHA
RECORD TYPE: Abstract
LANGUAGE: RUSSIAN

...ABSTRACT: at acidic pH values of the aqueous phase under the following conditions: use of the double emulsification method, use of the inert filler .sbd. 5% *polyethylenimine* for the formation of spherical non-*aggregated* microcapsules containing a small quantity of the *protein* in the membrane, and use of polycarbonate as a film-forming polymer. The kinetics of trypsin inhibition by soybean inhibitor, trypsin autolysis and trypsinogen autoactivation...

6/3,K/10 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

05044262 EMBASE No: 1992184478
Magnetic resonance imaging detection of an experimental pulmonary perfusion deficit using a macromolecular contrast agent: Polylysine-gadolinium-DTPAinf 4inf 0
Berthezene Y.; Vexler V.; Price D.C.; Wisner-Dupon J.; Moseley M.E.;

Aicher K.P.; Brasch R.C.
Contrast Media Laboratory, Department of Radiology, University of California, 513 Parnassus Ave.,San Francisco, CA 94143-0628 United States
Investigative Radiology (INVEST. RADIOL.) (United States) 1992, 27/5 (346-351)
CODEN: INVRA ISSN: 0020-9996
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

RATIONALE AND OBJECTIVES. This study was designed to evaluate the potential of a blood-pool magnetic resonance (MR) contrast agent, *polylysine*- gadolinium-DTPAinf 4inf 0 (*polylysine*-Gd-DTPAinf 4inf 0) for detecting pulmonary perfusion defects. MATERIALS AND METHODS. Pulmonary emboli were induced in 10 rats by venous injection of 0.2... ...of air. Axial spin-echo images were acquired (TR = 800 mseconds; TE = 6 mseconds) before and after air injection and serially after the administration of *polylysine*-Gd-DTPAinf 4inf 0. The embolism model was confirmed by scintigraphy using sup 9sup 9sup mTc-*macroaggregated* *albumin*. RESULTS. Signal intensity differences between normal and embolized lungs before and after the air injection were less than 25%. After *polylysine*-Gd- DTPAinf 4inf 0 administration, signal intensity of the perfused lung increased more than 200%, whereas the embolized lung increased by only 25%. Signal intensities...

6/3,K/11 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

03577957 EMBASE No: 1988027393
Thromboxane Ainf 2 causes feedback amplification involving extensive thromboxane Ainf 2 formation on close contact of human platelets in media with a low concentration of ionized calcium
Packham M.A.; Kinlough-Rathbone R.L.; Mustard J.F.
Department of Biochemistry, University of Toronto, Toronto, Ont. M5S 1A8 Canada
Blood (BLOOD) (United States) 1987, 70/3 (647-651)
CODEN: BLOOA ISSN: 0006-4971
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...to produce these responses. Platelets were washed and resuspended in a modified Tyrode solution to which no calcium salt was added that contained 0.35% *albumin* and apyrase. This medium contains 20 mumol/L Casup 2sup + and 1 mmol/L Mgsup 2sup +. Platelets were *aggregated* with adenosine diphosphate (ADP) in the presence of fibrinogen, agglutinated with *polylysine*, or after pretreatment with chymotrypsin, *aggregated* with fibrinogen. In the low-Casup 2sup + medium, all these agonists caused platelets to adhere to each other, followed by secondary aggregation with TXAinf 2...

6/3,K/12 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

01845269 EMBASE No: 1981216426
Interactions between polymerized human albumin, hepatitis B surface antigen, and complement. I. Binding of polyalbumin to C1q
Milich D.R.; Papas E.D.; Bhatnagar P.K.; Vyas G.N.
Dept. Lab. Med., Univ. California Sch. Med., San Francisco, CA 94143 United States
Journal of Medical Virology (J. MED. VIROL.) (United States) 1981; 7/3 (181-192)
CODEN: JMVID

DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

...evidence that substances other than immunoglobulins can bind human C1q. Utilizing purified human C1q immobilized on polystyrene beads, the authors have demonstrated that polymerized human *albumin* (PHALB-sup 1sup 2sup 5I) binds to human C1q in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in that human C1q bound only human, and not xenogeneic, polyalbumins. Similarly, polymers of various other human plasma proteins...
...this interaction was not unique to immobilized C1q, soluble C1q was shown to inhibit PHALB-sup 1sup 2sup 5I binding to solid phase C1q. Because *aggregated* IgG, poly(I):poly(C), dextran sulfate, polyglutamic acid, and *polylysine* have been previously shown to bind C1q, the authors used them in further blocking experiments and found them also to inhibit the interaction between C1q...

...temperature dependent. In addition, human C1q was not observed to bind hepatitis B surface antigen (HBsAg) directly; however, in the presence of sufficiently polymerized human *albumin* a C1q-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function as well as in the host defense mechanisms...
?ds

```
Set     Items   Description
S1      12308   (AGGREGATED OR MACROAGGREGATED) (S) (ALBUMIN OR TRANSFERRIN
              OR PROTEIN OR LIGAND)
S2         24   S1 (S) (POLYETHYLENIMINE OR POLYLYSINE OR POLYIMINE)
S3          7   S2 (S) (DNA OR VECTOR)
S4          3   RD (unique items)
S5         15   RD S2 (unique items)
S6         12   S5 NOT S4
?s s1 and ((DNA (w) vaccine) or (genetic (w) immunization))
           12308  S1
         2107903  DNA
          229859  VACCINE
            4682  DNA(W)VACCINE
         1361170  GENETIC
          190390  IMMUNIZATION
             848  GENETIC(W)IMMUNIZATION
      S7       6  S1 AND ((DNA (W) VACCINE) OR (GENETIC (W) IMMUNIZATION))
?rd
...completed examining records
      S8       2  RD (unique items)
?t s8/3,k/all
```

8/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11997177 99442778 PMID: 10513287
Antiserum generated by *DNA* *vaccine* binds to hepatitis E virus (HEV) as determined by PCR and immune electron microscopy (IEM): application for HEV detection by affinity-capture RT-PCR.
He J; Binn L N; Caudill J D; Asher L V; Longer C F; Innis B L
Department of Virus Diseases, Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington, DC 20307-5100, USA.
Virus research (NETHERLANDS) Jul 1999, 62 (1) p59-65, ISSN 0168-1702 Journal Code: 8410979
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Antiserum generated *DNA* *vaccine* binds to hepatitis E virus (HEV) as determined by PCR and immune electron microscopy (IEM): application for HEV detection by affinity-capture RT-PCR.

... s ability to bind HEV using immune electron microscope (IEM) and affinity-capture reverse transcription polymerase chain reaction (RT-PCR) amplification. Antiserum to ORF-2 *aggregated* HEV virions as seen by electron microscopy, providing direct evidence that ORF-2 encodes a structural *protein*. Antiserum also captured HEV for RT-PCR amplification. This antiserum bound HEV from diverse origins (Asia, Africa, Mexico) at virus concentrations found in patient fecal...

... divergent HEV, Mexico'86. HEV was detected in a 10(-8) dilution of this bile. This is the first report that antibodies elicited by a *DNA* *vaccine* recognize native HEV. Our results indicate that ORF-2 encodes a structural *protein* and that antiserum to this *protein* enables simple, sensitive, and specific HEV detection by affinity-capture RT-PCR.

8/3,K/2 (Item 2 from file: 155)

09009872 20302782 PMID: 10843685

***Genetic* *immunization* with lung-targeting *macroaggregated* polyethyleneimine-*albumin* conjugates elicits combined systemic and mucosal immune responses.**

Orson F M; Kinsey B M; Hua P J; Bhogal B S; Densmore C L; Barry M A
Veterans Affairs Medical Center, Baylor College of Medicine, Houston, TX 77030, USA. forson@bcm.tmc.edu

Journal of immunology (Baltimore, Md. - 1950) (UNITED STATES) Jun 15 2000, 164 (12) p6313-21, ISSN 0022-1767 Journal Code: 2985117R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

***Genetic* *immunization* with lung-targeting *macroaggregated* polyethyleneimine-*albumin* conjugates elicits combined systemic and mucosal immune responses.**

Genetic *immunization* is a novel form of vaccination in which transgenes are delivered into the host to produce the foreign *protein* within host cells. Although systemic immune responses have been relatively easy to induce by *genetic* *immunization*, the induction of regional and mucosal immunity has often been more challenging. To address the problem of eliciting mucosal immunity in the lung, we utilized *macroaggregated* *albumin* to target plasmid DNA to the lung. *Macroaggregated* *albumin* is trapped in the lung after i. v. injection, and it is routinely used in radiolabeled form as an imaging modality to evaluate pulmonary blood flow. To couple DNA to this targeting agent, polyethyleneimine (a polycation that binds DNA and enhances transfection) was conjugated to serum *albumin*, and the conjugate was *aggregated* by heating to produce particles of 25-100 microm. The resulting particles bound plasmid DNA avidly, and when injected i.v. in mice, the particles...

... immune responses, whereas naked DNA injected either i.v. or i.m. elicited only systemic responses. Thus, particle-bound plasmid DNA may have utility for *genetic* *immunization* by intravascular delivery to the lung and potentially to other organs and tissues.

Descriptors: Immunity, Mucosal; *Lung--immunology--IM; *Polyethyleneimine --administration and dosage--AD; *Technetium Tc 99m *Aggregated* *Albumin* --immunology--IM; *Vaccines, DNA--immunology--IM...; Data; Particle Size; Plasmids--administration and dosage--AD; Plasmids--immunology--IM; Plasmids--pharmacokinetics--PK; Polyethyleneimine--pharmacokinetics--PK; T-Lymphocytes, Cytotoxic--immunology--IM; Technetium Tc 99m *Aggregated* *Albumin*--administration and dosage--AD; Technetium Tc 99m *Aggregated* *Albumin*--pharmacokinetics--PK; Transfection--immunology--IM; Tumor Cells,

Cultured; Vaccines, DNA[redacted]administration and dosage--AL[redacted] Vaccines, DNA --pharmacokinetics--PK
Chemical Name: Plasmids; Technetium Tc 99m *Aggregated* *Albumin*; Vaccines, DNA; Polyethyleneimine; DNA
?ds

Set	Items	Description
S1	12308	(AGGREGATED OR MACROAGGREGATED) (S) (ALBUMIN OR TRANSFERRIN OR PROTEIN OR LIGAND)
S2	24	S1 (S) (POLYETHYLENIMINE OR POLYLYSINE OR POLYIMINE)
S3	7	S2 (S) (DNA OR VECTOR)
S4	3	RD (unique items)
S5	15	RD S2 (unique items)
S6	12	S5 NOT S4
S7	6	S1 AND ((DNA (W) VACCINE) OR (GENETIC (W) IMMUNIZATION))
S8	2	RD (unique items)

?s ((DNA (w) vaccine) or (genetic (w) immunization)) and (HIV)

	2107903	DNA
	229859	VACCINE
	4682	DNA(W)VACCINE
	1361170	GENETIC
	190390	IMMUNIZATION
	848	GENETIC(W)IMMUNIZATION
	333940	HIV
S9	658	((DNA (W) VACCINE) OR (GENETIC (W) IMMUNIZATION)) AND (HIV)

?s s9 and (treatment or therapy)

	658	S9
	4437790	TREATMENT
	5052165	THERAPY
S10	205	S9 AND (TREATMENT OR THERAPY)

?s s10 and review

	205	S10
	1404989	REVIEW
S11	55	S10 AND REVIEW

?s s11 not py<1998
Processing
Processing

	55	S11
	29513559	PY<1998
S12	50	S11 NOT PY<1998

?rd
...examined 50 records (50)
...completed examining records

S13	48	RD (unique items)

?t s13/3,k/1-10

13/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13948690 BIOSIS NO.: 200200577511
Full-length proteins attached to the *HIV* tat protein transduction domain are neither transduced between cells, nor exhibit enhanced immunogenicity.
AUTHOR: Leifert J A; Harkins S; Whitton J L(a)
AUTHOR ADDRESS: (a)Department of Neuropharmacology, The Scripps Research Institute, 10550 N Torrey Pines Road, CVN-9, La Jolla, CA, 92037**USA
JOURNAL: Gene Therapy 9 (21):p1422-1428 November, 2002
MEDIUM: print
ISSN: 0969-7128
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Full-length proteins attached to the *HIV* tat protein transduction domain

are neither transduced tween cells, nor exhibit enhan immunogenicity.

...ABSTRACT: a highly basic series of residues currently termed a 'protein transduction domain' (PTD). This translocatory attribute, if authentic, would be valuable for purposes of gene *therapy* and vaccination. We have evaluated the PTD from the human immunodeficiency virus type 1 (*HIV*) tat protein and we conclude that, when synthesized de novo, (1) the *HIV* tat PTD does not enhance the immunogenicity of a full-length protein to which it is tethered; and (2) the *HIV* tat PTD does not cause intercellular transfer of an attached marker protein, as judged by careful quantitative analyses. From our data, and from a *review* of published materials, we suggest that contrary to current dogma there is little evidence that these supposedly translocatory proteins can move between live cells. Furthermore...

...explain why the most dramatic demonstrations of PTD efficacy have been obtained using fixed cells and/or denatured proteins, and have obvious implications for gene *therapy* and vaccination.
DESCRIPTORS:
ORGANISMS: human immunodeficiency virus (*HIV*) (Retroviridae...
CHEMICALS & BIOCHEMICALS: ...*DNA* *vaccine*--
...METHODS & EQUIPMENT: gene *therapy*--

13/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13448209 BIOSIS NO.: 200200077030
DNA vaccines: Future strategies and relevance to intracellular pathogens.
AUTHOR: Sharma A K; Khuller G K(a)
AUTHOR ADDRESS: (a)Department of Biochemistry, Postgraduate Institute of Medical Education and Research, Chandigarh, 160 012**India E-Mail: gkkhuller@yahoo.co.in
JOURNAL: Immunology and Cell Biology 79 (6):p537-546 December, 2001
MEDIUM: print
ISSN: 0818-9641
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: induce appears to be mediated by long-lived humoral immune responses. However, there are no consistently effective vaccines available against diseases such as tuberculosis and *HIV*, and other infections caused by intracellular pathogens, which are predominantly controlled by T lymphocytes. This *review* describes the T-cell populations and the type of immunity that should be activated by successful DNA vaccines against intracellular pathogens. It further discusses the...
DESCRIPTORS:
...ORGANISMS: *DNA* *vaccine* development
...DISEASES: immunology, infectious disease, *therapy*

13/3,K/3 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

11989445 EMBASE No: 2003100274
***HIV* immunology better understood and vaccination attempts started**
Wahren B.; Landay A.
B. Wahren, Swed. Ctr. for Infect. Dis. Control, Dept. Virology, S-105 21, Stockholm Sweden
AIDS (AIDS) (United Kingdom) 2002, 16/SUPPL. 4 (S85-S88)
CODEN: AIDSE ISSN: 0269-9370

DOCUMENT TYPE: Journal Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 29

***HIV* immunology better understood and vaccination attempts started**
DRUG DESCRIPTORS:
Human immunodeficiency virus vaccine--drug development--dv; Human immunodeficiency virus vaccine--pharmacology--pd; *DNA* *vaccine*--drug development--dv; *DNA* *vaccine*--pharmacology--pd; abacavir--drug toxicity --to
MEDICAL DESCRIPTORS:
...antigen presentation; sexual transmission; virus transmission; mucosa; antibody production; autoimmunity; receptor affinity; codon usage; drug design; drug safety; dendritic cell; T lymphocyte; apoptosis; viral gene *therapy*; infection prevention; virus envelope; highly active antiretroviral *therapy*; adoptive immunotherapy; virus load; drug efficacy ; human; nonhuman; *review*; priority journal

13/3,K/4 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11985701 EMBASE No: 2003096133
Immune reconstitution in *HIV*-1-infected patients
Imami N.; Hardy G.; Pires A.; Burton C.; Pido-Lopez J.; Mela C.; Gotch F.
N. Imami, Department of Immunology, Division of Investigative Science, Imperial Coll. of Sci. Technol./Med., 369 Fulham Road, London SW10 9NH United Kingdom
AUTHOR EMAIL: n.imami@ic.ac.uk
Current Opinion in Investigational Drugs (CURR. OPIN. INVEST. DRUGS) (United Kingdom) 01 AUG 2002, 3/8 (1138-1145)
CODEN: CIDRE ISSN: 1472-4472
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 114

Immune reconstitution in *HIV*-1-infected patients

HIV-1-specific CD8 cytotoxic and CD4 helper T-lymphocytes, which are respectively the central effector and regulatory cells in viral infections, together with fully functional antigen-presenting cells, are essential at all stages of *HIV*-1 infection to control viral activity. Recent studies indicate that such protective *HIV*-1-specific immune responses can be preserved/induced in *HIV*-1-infected individuals, utilizing strategies such as *treatment* interruption after early HAART. Despite successful combination antiretroviral drug *therapy*, strong anti-*HIV*-1 T-cell responses are often not apparent in chronic *HIV*-1 infection, diminishing the probability of viral eradication. Thus, the therapeutic use of immunization and cytokines are required to induce and steer immunity towards a desirable outcome. Here, we *review* and discuss therapeutic immunization and immunotherapy with regard to their potential use in the *treatment* of chronic *HIV*-1 infection.
DRUG DESCRIPTORS:
antiretrovirus agent--drug *therapy*--dt; antiretrovirus agent --pharmacology--pd; antiretrovirus agent--drug combination--cb; antiretrovirus agent--adverse drug reaction--ae; antiretrovirus agent --clinical trial--ct; antiretrovirus agent--drug comparison--cm; cytokine --drug *therapy*--dt; cytokine--pharmacology--pd; cytokine--drug combination--cb; cytokine--adverse drug reaction--ae; cytokine--clinical trial--ct; cytokine--drug comparison--cm; Human immunodeficiency virus vaccine--drug *therapy*--dt; Human immunodeficiency virus vaccine--clinical trial--ct; Human immunodeficiency virus vaccine--drug combination--cb; Human immunodeficiency virus vaccine--pharmacology--pd; Human immunodeficiency virus vaccine--adverse drug reaction--ae; Human immunodeficiency virus vaccine--drug comparison--cm; interleukin 2--drug

therapy--dt; interleuk 2--pharmacology--pd; interleuk 2--drug combination--cb; interleukin 2--adverse drug reaction--ae; interleukin 2 --clinical trial--ct; interleukin 2--drug comparison--cm; granulocyte macrophage colony stimulating factor--drug *therapy*--dt; granulocyte macrophage colony stimulating factor--drug combination--cb; granulocyte macrophage colony stimulating factor--clinical trial--ct; interleukin 7 --drug *therapy*--dt; interleukin 7--pharmacology--pd; interleukin 12--drug *therapy*--dt; interleukin 12--clinical trial--ct; interleukin 12 --pharmacology--pd; growth hormone--drug *therapy*--dt; growth hormone --drug combination--cb; thymosin--drug *therapy*--dt; thymosin--drug combination--cb; thymosin--pharmacology--pd; zidovudine--drug *therapy*--dt ; zidovudine--drug combination--cb; zidovudine--clinical trial--ct; zidovudine--pharmacology--pd; virus vaccine--drug *therapy*--dt; virus vaccine--clinical trial--ct; virus vaccine--topical drug administration--tp ; antigen; *DNA* *vaccine*--drug combination--cb; *DNA* *vaccine*--drug *therapy*--dt; *DNA* *vaccine*--topical drug administration--tp; *DNA* *vaccine*--pharmacology--pd; nucleoside analog--drug *therapy*--dt; nucleoside analog--clinical trial--ct; nucleoside analog--drug combination --cb; nucleoside analog--pharmacology--pd; thymosin alpha1--drug *therapy* --dt; thymosin alpha1--pharmacology--pd; thymosin alpha1--drug combination --cb; unclassified drug
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--drug *therapy*--dt; *Human immunodeficiency virus infection--drug resistance--dr; *Human immunodeficiency virus infection--disease management--dm; *immune response human; clinical trial; nonhuman; Human immunodeficiency virus 1; cytotoxic T lymphocyte; helper cell; effector cell; regulatory mechanism; antiviral activity; highly active antiretroviral *therapy*; probability; eradication *therapy*; immunization; combination chemotherapy; immunotherapy; *treatment* outcome; drug efficacy; drug toxicity--side effect--si; DNA vector; staging; cellular immunity; immunomodulation; virus inhibition; drug effect; side effect--side effect--si; *review*
DRUG TERMS (UNCONTROLLED): Human immunodeficiency virus antigen p17 p24 virus like particle vaccine--drug *therapy*--dt; Human immunodeficiency virus antigen p17 p24 virus like particle vaccine--clinical trial--ct; Human immunodeficiency virus antigen p17 p24 virus like particle vaccine --drug...

...p17 p24 virus like particle vaccine--drug dose--do; Human immunodeficiency virus antigen p17 p24 virus like particle vaccine --pharmacology--pd; Albany vaccine 1452--drug *therapy*--dt; Albany vaccine 1452--drug combination--cb; Albany vaccine 1452--pharmacology--pd; Albany vaccine 1452--clinical trial--ct; canarypox virus vaccine--drug *therapy* --dt; canarypox virus vaccine--drug combination--cb; canarypox virus vaccine--pharmacology--pd; canarypox virus vaccine--clinical trial--ct; adenovirus vaccine--drug dose--do; adenovirus vaccine--pharmacology--pd; adenovirus vaccine--drug *therapy*--dt; dermavir

13/3,K/5 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

11956597 EMBASE No: 2003067508
Construction and immunogenicity in a prime-boost regimen of a Semliki Forest virus-vectored experimental *HIV* clade A vaccine
Hanke T.; Barnfield C.; Wee E.G.-T.; Agren L.; Samuel R.V.; Larke N.; Liljestrom P.
T. Hanke, MRC Human Immunology Unit, Weatherall Inst. of Molecular Med., The John Radcliffe, Oxford OX3 9DS United Kingdom
AUTHOR EMAIL: thanke@molbiol.ox.ac.uk
Journal of General Virology (J. GEN. VIROL.) (United Kingdom) 01 FEB 2003, 84/2 (361-368)
CODEN: JGVIA ISSN: 0022-1317
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES:

Construction and immunogenicity in a prime-boost regimen of a Semliki Forest virus-vectored experimental *HIV* clade A vaccine

A novel, experimental subunit human immunodeficiency virus (*HIV*) vaccine, SFV.HIVA, was constructed. This consists of Semliki Forest virus (SFV), which is a suitable vaccine vector for use in humans, and a passenger gene encoding HIVA, which is an immunogen derived from *HIV*-1 clade A that is being currently tested in clinical trials of combined DNA- and modified vaccinia virus Ankara (MVA)-vectored vaccines in Oxford (UK...
DRUG DESCRIPTORS:
*Human immunodeficiency virus vaccine--drug comparison--cm; *Human immunodeficiency virus vaccine--drug development--dv; *Human immunodeficiency virus vaccine--drug *therapy*--dt; *Human immunodeficiency virus vaccine--pharmaceutics--pr; *Human immunodeficiency virus vaccine --pharmacology--pd; *Human immunodeficiency virus vaccine--subcutaneous drug administration--sc; *Human immunodeficiency virus antigen--drug comparison--cm; *Human immunodeficiency virus antigen--drug development--dv ; *Human immunodeficiency virus antigen--drug *therapy*--dt; *Human immunodeficiency virus antigen--pharmaceutics--pr; *Human immunodeficiency virus antigen--pharmacology--pd; *Human immunodeficiency virus antigen --subcutaneous drug administration--sc
subunit vaccine--drug comparison--cm; subunit vaccine--drug development--dv ; subunit vaccine--drug *therapy*--dt; subunit vaccine--pharmaceutics--pr; subunit vaccine--pharmacology--pd; subunit vaccine--subcutaneous drug administration--sc; *DNA* *vaccine*--drug comparison--cm; *DNA* *vaccine* --drug *therapy*--dt; *DNA* *vaccine*--pharmaceutics--pr; *DNA* *vaccine* --pharmacology--pd; *DNA* *vaccine*--intramuscular drug administration--im
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--drug *therapy*--dt; *Semliki Forest alphavirus; *virus vector
...lymphocyte; cellular immunity; memory cell; drug response; time; antigen expression; vaccination; clinical study; human; nonhuman; female; mouse; animal experiment; animal model; controlled study; animal tissue; *review*; priority journal

13/3,K/6 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

11926268 EMBASE No: 2003037063
***HIV*-1 therapeutic vaccines**
Kinloch-de Loes S.; Autran B.
S. Kinloch-de Loes, Department of HIV/Throacic Medicine, The Royal Free Centre for HIV Med., Royal Free/Univ. College Med. School, Rowland Hill Street, London NW3 2PF United Kingdom
AUTHOR EMAIL: sabine@kinloch.u-net.com
Journal of Infection (J. INFECT.) (United Kingdom) 2002, 44/3 (152-159)
CODEN: JINFD ISSN: 0163-4453
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 102

***HIV*-1 therapeutic vaccines**

In this *review*, we address recent advances in the understanding of the pathogenesis of human immunodeficiency type 1 virus infection, which have provided the rationale for present trials of therapeutic vaccines. We shall relate this work to lessons of the past few years both in the use of highly active antiretroviral *therapy* to attempt eradication of the *HIV* virus, and in the study of *treatment* interruptions. (c) 2002 The British Infection Society.
DRUG DESCRIPTORS:

...*virus vaccine--adver[redacted]drug reaction--ae; *Human immu[redacted]eficiency virus vaccine--drug combination--cb; *Human immunodeficiency virus vaccine--drug development--dv; *Human immunodeficiency virus vaccine--drug *therapy*--dt; *Human immunodeficiency virus vaccine--pharmaceutics--pr
antiretrovirus agent--adverse drug reaction--ae; antiretrovirus agent--drug combination--cb; antiretrovirus agent--drug development--dv; antiretrovirus agent--drug *therapy*--dt; antiretrovirus agent--pharmacoeconomics--pe; antivirus agent--adverse drug reaction--ae; antivirus agent--drug *therapy* --dt; antivirus agent--pharmacoeconomics--pe; lipid--endogenous compound --ec; CD4 antigen--endogenous compound--ec; interleukin 2--drug combination --cb; interleukin 2--drug *therapy*--dt; CD8 antigen--endogenous compound --ec; zidovudine--drug *therapy*--dt; granulocyte macrophage colony stimulating factor--drug combination--cb; granulocyte macrophage colony stimulating factor--drug *therapy*--dt; virus vaccine--drug development--dv ; virus vaccine--drug *therapy*--dt; Gag protein--drug development--dv; Gag protein--drug *therapy*--dt; *DNA* *vaccine*--adverse drug reaction--ae; *DNA* *vaccine*--drug development--dv; *DNA* *vaccine*--drug *therapy*--dt; lipopeptide--drug development--dv; lipopeptide--drug *therapy*--dt; Nef protein--drug development--dv; Nef protein--drug *therapy*--dt; virus envelope protein--drug development--dv; virus envelope protein--drug *therapy*--dt
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--disease management--dm; *Human immunodeficiency virus infection--drug resistance--dr; *Human immunodeficiency virus infection--drug *therapy*--dt; *Human immunodeficiency virus infection--etiology--et; *Human immunodeficiency virus infection--prevention--pc; *Human immunodeficiency virus 1 pathogenesis; drug use; eradication *therapy*; *treatment* outcome; acquired immune deficiency syndrome--complication--co; acquired immune deficiency syndrome--drug *therapy*--dt; acquired immune deficiency syndrome--prevention--pc; disease course; death; virus replication; patient care; patient compliance; drug efficacy; antibiotic resistance; drug cost; dyslipidemia--side effect--si; viremia; cytotoxic T lymphocyte; lymphocyte count; immune response; seroconversion; drug withdrawal; *treatment* failure; virus vector; Canarypox virus; yeast; drug safety; highly active antiretroviral *therapy*; human; *review*

13/3,K/7 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

11895644 EMBASE No: 2003006770
Prospects for an *HIV* vaccine: Conventional approaches and DNA immunization
Baumeister M.A.; Chattergoon M.A.; Weiner D.B.
D.B. Weiner, Univ. of Pennsylvania Sch. of Med., Department of Pathology, 505 Stellar-Chance Laboratories, 422 Curie Blvd., Philadelphia, PA 19104 United States
AUTHOR EMAIL: dbweiner@mail.med.upenn.edu
Biotechnology and Genetic Engineering Reviews (BIOTECHNOL. GENET. ENG. REV.) (United Kingdom) 2002, 19/- (205-242)
CODEN: BGERE ISSN: 0264-8725
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 121

Prospects for an *HIV* vaccine: Conventional approaches and DNA immunization
DRUG DESCRIPTORS:
*Human immunodeficiency virus vaccine--drug analysis--an; *Human immunodeficiency virus vaccine--drug development--dv; *Human immunodeficiency virus vaccine--drug *therapy*--dt; *recombinant vaccine --drug analysis--an; *recombinant vaccine--drug development--dv; * recombinant vaccine--drug *therapy*--dt
...histocompatibility antigen class 2; CD40 ligand--endogenous compound--ec

; glycoprotein gp 120--d analysis--an; glycoprotein gp 0--drug development--dv; glycoprotein gp 120--drug *therapy*--dt; live vaccine --drug analysis--an; live vaccine--drug development--dv; live vaccine--drug *therapy*--dt; *DNA* *vaccine*--drug analysis--an; *DNA* *vaccine*--drug development--dv; *DNA* *vaccine*--drug *therapy*--dt
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--drug *therapy*--dt; *Human immunodeficiency virus infection--etiology--et; *Human immunodeficiency virus infection--prevention--pc
...lymphocyte; B lymphocyte activation; signal transduction; antigen presenting cell; drug design; immunomodulation; immunoregulation; antibody response; genetic polymorphism; virus genome; DNA transfection; drug safety ; human; nonhuman; *review*

13/3,K/8 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

11890109 EMBASE No: 2003001291
Priorities in tuberculosis research in India
Ganguly N.K.; Walia K.
Dr. N.K. Ganguly, Indian Council of Medical Research, New Delhi-110029 India
Indian Journal of Pediatrics (INDIAN J. PEDIATR.) (India) 01 NOV 2002 , 69/SUPPL. 1 (S50-S56)
CODEN: IJPEA ISSN: 0019-5456
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 14

...of all tuberculosis cases in the world today and more adults in India die from TB than from any other infectious disease. The problems of *HIV* and multidrug resistance will make tuberculosis epidemic in India much worse unless urgent action is taken. DOTS is being applied on individual basis in the...

...data and tools they need to analyse continuously improve services they offer, hence this must be strengthened with an overall aim to improve diagnosis and *treatment* of TB patients by translating the results of research into policy and practice. At the same time one should aim to strengthening biomedical research which promises convenient diagnostic tests, new and cost effective drugs and safe an effective vaccines, shortening of *treatment*, improved *treatment* of latest infection and overcoming threat of MDR-TB. The challenge is how to achieve this formidable goal as well as gear up to efficiently handle the growing burden of *HIV*-TB infected patients. The key to success lies in making, available to all what we already have, by strengthening operational aspects of programme and at...
DRUG DESCRIPTORS:
*tuberculostatic agent--drug *therapy*--dt; *isoniazid--drug *therapy*--dt; *rifampicin--drug *therapy*--dt; *BCG vaccine--drug *therapy*--dt
Mycobacterium vaccine--drug development--dv; *DNA* *vaccine*--drug development--dv
MEDICAL DESCRIPTORS:
*tuberculosis--complication--co; *tuberculosis--diagnosis--di; * tuberculosis--drug resistance--dr; *tuberculosis--drug *therapy*--dt; * tuberculosis--epidemiology--ep; *tuberculosis--prevention--pc
India; Mycobacterium tuberculosis; multidrug resistance; bacterium isolate; Human immunodeficiency virus infection--epidemiology--ep; BCG vaccination; polymerase chain reaction; tuberculosis control; medical research; human; nonhuman; *review*

13/3,K/9 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE

11872284 EMBASE No: 2002445552

Cytokines as adjuvants for *HIV* DNA vaccines

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Cytokines as adjuvants for *HIV* DNA vaccines

The best hope for the prevention of *HIV*/AIDS, especially in resource-poor countries, is an effective preventive vaccine. Considerable effort is being made to develop a safe and efficacious vaccine that will elicit broad, protective immunity to *HIV*. Most of the current vaccine development strategies focus on viral subunit immunogens, which tend to be less than optimally immunogenic and thus require methods to...

...the manipulation of the host response to both enhance overall immunogenicity and direct the nature of the response toward a Th1 or Th2 pathway. This *review* describes the various *HIV* immunogens and cytokine formulations that are being considered and the state of knowledge about in vitro studies, preclinial and clinical trials of these cytokine-adjuvanted *HIV* vaccines. (c) 2002 Elsevier Science Inc. All rights reserved.

DRUG DESCRIPTORS:
*cytokine--drug development--dv; *cytokine--drug *therapy*--dt; *cytokine --pharmacology--pd; **DNA* *vaccine*--drug development--dv; **DNA* *vaccine*--drug *therapy*--dt; **DNA* *vaccine*--pharmacology--pd; *Human immunodeficiency virus vaccine--clinical trial--ct; *Human immunodeficiency virus vaccine--drug development--dv; *Human immunodeficiency virus vaccine --drug *therapy*--dt; *Human immunodeficiency virus vaccine--pharmacology --pd
antigen--endogenous compound--ec; neutralizing antibody--endogenous compound--ec; recombinant protein--drug development--dv; recombinant protein--drug *therapy*--dt; recombinant protein--pharmacology--pd; interleukin 2--endogenous compound--ec; interleukin 4--endogenous compound --ec; interleukin 7--endogenous compound--ec; interleukin 12--endogenous compound--ec...
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--drug *therapy*--dt; *Human immunodeficiency virus infection--prevention--pc; *acquired immune deficiency syndrome--drug *therapy*--dt; *acquired immune deficiency syndrome--prevention--pc
adjuvant *therapy*; vaccination; drug safety; drug efficacy; virus immunity ; Human immunodeficiency virus; cellular immunity; immunomodulation; immune function test; immune response; immunogenicity; Th1 cell; Th2 cell; in vitro study; drug design; drug mechanism; Lentivirinae; Macaca; Retrovirus infection--drug *therapy*--dt; Retrovirus infection--prevention--pc; human; nonhuman; mouse; clinical trial; animal experiment; animal model; *review*

13/3,K/10 (Item 8 from file: 73)
DIALOG(R)File 73:EMBASE

11871283 EMBASE No: 2002444413

Gene *therapy* approaches to *HIV* infection

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American Journal of PharmacoGenomics (AM. J. PHARMACOGENOMICS) (New Zealand) 2002, 2/4 (245-252)
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NUMBER OF REFERENCES: 77

Gene *therapy* approaches to *HIV* infection

The *HIV* pandemic represents a new challenge to biomedical research. What began as a handful of recognized cases among homosexual men in the US has become a...

...a major priority, because of the lack of chemotherapeutic drugs or vaccines that show long-term efficacy in vivo. Recently, gene therapeutic strategies for the *treatment* of patients with *HIV* infection have received increased attention because they are able to offer the possibility of simultaneously targeting multiple sites in the *HIV* genome, thereby minimizing the production of resistant virus. Recombinant genes for gene *therapy* can be classified as expressing interfering proteins (intracellular antibodies, dominant negative proteins) or interfering RNAs (antisense RNAs, ribozymes, RNA decoys). The latter group offers the...

...expanding. Since the immune system can significantly amplify the response to tiny amounts of antigen, DNA vaccines can indeed be delivered by exploiting traditional gene *therapy* approaches without the need of high transduction efficiency.
DRUG DESCRIPTORS:
*recombinant DNA--drug administration--ad; *recombinant DNA--drug development--dv; *recombinant DNA--drug *therapy*--dt; *recombinant DNA --pharmacology--pd; *recombinant DNA--intramuscular drug administration--im cell antibody--drug *therapy*--dt; cell antibody--pharmacology--pd; complementary RNA--drug *therapy*--dt; complementary RNA--pharmacology--pd; ribozyme--drug *therapy*--dt; ribozyme--pharmacology--pd; Gag protein--drug *therapy*--dt; Gag protein--pharmacology--pd; virus envelope protein--drug *therapy*--dt; virus envelope protein--pharmacology--pd; Rev protein--drug *therapy*--dt; Rev protein--pharmacology--pd; Vpr protein--drug *therapy* --dt; Vpr protein--pharmacology--pd; *DNA* *vaccine*--drug administration --ad; *DNA* *vaccine*--pharmacology--pd; *DNA* *vaccine*--intramuscular drug administration--im; polyethyleneimine--drug development--dv; polyethyleneimine--pharmaceutics--pr; polyethyleneimine--pharmacology--pd
MEDICAL DESCRIPTORS:
*Human immunodeficiency virus infection--drug *therapy*--dt; *Human immunodeficiency virus infection--etiology--et; *Human immunodeficiency virus infection--prevention--pc; *Human immunodeficiency virus infection-- *therapy*--th; *gene *therapy*
...delivery system; drug DNA binding; endocytosis; dendritic cell; DNA modification; cytotoxic T lymphocyte; memory cell; cross reaction; antibody response; intermethod comparison; drug efficacy; human; nonhuman; *review*; priority journal
?ds

Set	Items	Description
S1	12308	(AGGREGATED OR MACROAGGREGATED) (S) (ALBUMIN OR TRANSFERRIN OR PROTEIN OR LIGAND)
S2	24	S1 (S) (POLYETHYLENIMINE OR POLYLYSINE OR POLYIMINE)
S3	7	S2 (S) (DNA OR VECTOR)
S4	3	RD (unique items)
S5	15	RD S2 (unique items)
S6	12	S5 NOT S4
S7	6	S1 AND ((DNA (W) VACCINE) OR (GENETIC (W) IMMUNIZATION))
S8	2	RD (unique items)
S9	658	((DNA (W) VACCINE) OR (GENETIC (W) IMMUNIZATION)) AND (HIV)

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S10        205   S9 AND ([redacted]ATMENT OR THERAPY)
S11         55   S10 AND REVIEW
S12         50   S11 NOT PY<1998
S13         48   RD (unique items)
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### Status: Signed Off. (29 minutes)
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